



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

Lyman Moore Middle School)	Departmental
Cumberland County)	Findings of Fact and Order
Portland, Maine)	Air Emission License
A-426-71-E-N)	After-The-Fact

After review of the air emissions license renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

1. The City of Portland, Maine has applied to renew their Air Emission License, after the fact, permitting the operation of emission sources associated with the Lyman Moore Middle School (Lyman Moore).
2. This renewal shall include a minor revision to reflect the removal of the facility's previously licensed Boiler #3 and a reduction in the facility's annual fuel use restriction from 100,000 gallons per year (gal/yr) to 90,000 gal/yr.

B. Emission Equipment

Lyman Moore is authorized to operate the following equipment:

Fuel Burning Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Date of Manufacture</u>	<u>Stack #</u>
Boiler #1	5.0	36	#2 oil, 0.5%	1999	1
Boiler #2	5.0	36	#2 oil, 0.5%	1999	1

C. Application Classification

The application for Lyman Moore does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of current licensed emission units only. This source is determined to be a minor source and has been processed as such.

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
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RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD
BANGOR, MAINE 04401
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PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-0477 FAX: (207) 760-3143

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 1, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Boilers #1 and #2

Lyman Moore operates Boilers #1 and #2 primarily for facility hot water and heating needs. Boilers #1 and #2 each have a maximum heat input capacity of 5.0 MMBtu/hr firing #2 fuel oil. Both boilers are below the de minimus threshold for and are therefore not subject to EPA New Source Performance Standards (NSPS) Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units applicable to boilers with a heat input of greater than 10 MMBtu/hr and manufactured after June 9, 1989).

Lyman Moore's previous Air Emission License included the operation of Boiler #3 (5.5 MMBtu/hr). Lyman Moore has since permanently removed this boiler. The facility's previous Air Emission License also established a #2 fuel oil restriction of 100,000 gal/yr. Lyman Moore has requested a reduction in this restriction to 90,000 gal/yr. The Department has also determined that #2 fuel oil that meets the sulfur content criteria of ASTM D396 (0.5% sulfur by weight) satisfies BPT.

In order to demonstrate compliance with the above fuel restriction and sulfur criteria requirement, Lyman Moore shall maintain a fuel use record which shall include fuel receipts showing the quantity of fuel delivered and certification indicating that the fuel meets the ASTM D396 sulfur content requirements. The fuel use record shall be maintained on a monthly and twelve-month rolling total basis. Twelve-month rolling total shall be determined monthly by adding the previous 11-month total capacities to the current month's total capacity.

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A summary of the BPT analysis for Boiler #1 (5.0 MMBtu/hr) and Boiler #2 (5.0 MMBtu/hr) is as follows:

- 1 *Fuel Burning Equipment Particulate Emission Standard*, 06-096 CMR 103, (last amended November 3, 1990) regulates PM emission limits and establishes limits for Boilers #1 and #2 of no greater than 0.12 lb/MMBtu. PM₁₀ limits are derived from PM limits.
- 2 NO_x emissions limits are based upon factors derived from similar sized and operated #2 fuel burning boilers.
- 3 SO₂, CO and VOC emission limits are based upon AP-42 data dated 7/01 for wood combustion.
- 4 Visible emissions from Stack #1 are subject to *Visible Emissions Regulation*, 06-096 CMR 101 (last amended May 18, 2003). Visible emissions from Stack #1 shall not exceed 20% opacity on a 6-minute average, except for no more than two 6-minute periods in a 3-hour period.

C. Annual Emission Restrictions

Lyman Moore shall be restricted to the following annual emissions, based on a twelve-month rolling total:

- The total fuel use for the facility shall not exceed 90,000 gal/yr of #2 fuel oil.

Total Allowable Annual Emission for the Facility (used to calculate the annual license fee)

Pollutant	Tons/Year
PM	1.3
PM ₁₀	1.3
SO ₂	3.2
NO _x	3.2
CO	0.2
VOC	0.1

III. AMBIENT AIR QUALITY ANALYSIS

According to *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 1, 2005), the level of air quality analyses required for a minor source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Lyman Moore is below the emissions level required for modeling or monitoring and the Department has determined that Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-426-71-E-N subject to the following conditions:

Severability: The invalidity or unenforceability of any provision, or part thereof, of this Air Emission License shall not affect the remainder of the provision or any other provisions. This Air Emission License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (Title 38 MRSA §347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in 06-096 CMR 115. [06-096 CMR 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]

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- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353.
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - (i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - a. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - b. pursuant to any other requirement of this license to perform stack testing.

- (ii) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - (iii) submit a written report to the Department within thirty (30) days from date of test completion. [06-096 CMR 115]
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- (i) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - (ii) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - (iii) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions. [06-096 CMR 115]
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]

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- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

- (16) Boilers #1 and #2

- A. Total facility fuel use shall not exceed 90,000 gals/yr of fuel oil based on a twelve-month rolling total. Lyman Moore shall fire only #2 fuel oil that meets the sulfur content criteria in ASTM D396 for #2 fuel oil.
- B. In order to demonstrate compliance with the above fuel restrictions, Lyman Moore shall maintain a fuel use record which shall include fuel receipts showing the quantity of fuel delivered and certification indicating that the fuel meets the ASTM D396 sulfur content requirements. The fuel use record shall be maintained on a monthly and twelve month rolling total basis. Twelve-month rolling total shall be determined monthly by adding the previous 11-month total capacities to the current month's total capacity.
- C. Emissions shall not exceed the following:

Equipment		PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Boiler #1	lb/MMBtu	0.12	n/a	n/a	n/a	n/a	n/a
	lb/hr	1.0	1.0	2.5	2.5	0.2	0.1
Boiler #2	lb/MMBtu	0.12	n/a	n/a	n/a	n/a	n/a
	lb/hr	1.0	1.0	2.5	2.5	0.2	0.1

- D. Visible emissions from Stack #1 shall not exceed 20% opacity on a six-minute block average except, for no more than 2 six-minute block averages in a 3-hour period.

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- (17) Lyman Moore shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (Title 38 MRSA §605-C).

DONE AND DATED IN AUGUSTA, MAINE THIS 11th DAY OF September 2009.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *James P. Brooks Jr.*
DAVID P. LITTELL, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

The term of this Order shall be for five (5) years from the above signature date.

Date of initial receipt of application: March 10, 2009

Date of application acceptance: March 18, 2009

Date filed with the Board of Environmental Protection:

This Order prepared by, Peter G. Carleton, Bureau of Air Quality

